STN-Structure Search 8/16/06

10/520,421

=> d ibib abs hitstr 1-9

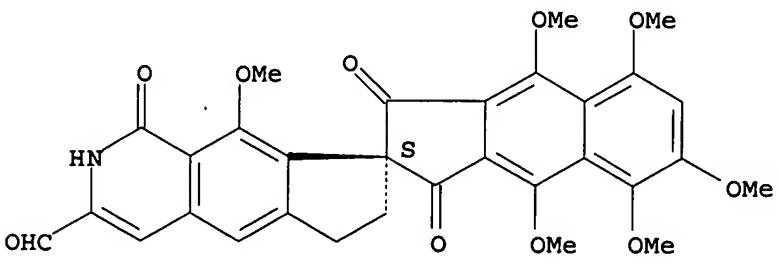
L7 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:187890 CAPLUS
DOCUMENT NUMBER: 134:353198
TITLE: Enantioselective Total Synthesis of a Potent Antitumor Antibiotic, Fredericamycin A
AUTHOR(S): Kita, Yasuyuki; Higuchi, Kazuhiro; Yoshida, Yutaka; Iio, Kiyosei; Kitagaki, Shinji; Ueda, Koichiro; Akai, Shuji; Fujioka, Hiromichi
CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Osaka University, Suita Osaka, 565-0871, Japan
SOURCE: Journal of the American Chemical Society (2001), 123(14), 3214-3222
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:353198

AB The asym. total synthesis of both enantiomers of the potent antitumor antibiotic fredericamycin A (I) is detailed based on the protocol for the construction of its peri-hydroxy polyarom. skeleton bearing the chirality at the spiro carbon via a strong base-induced cycloaddn. of suitably substituted homophthalic anhydrides (AB-ring unit) with an optically active CDEF-ring unit. Particular attention has been given to the novel synthesis of the optically active spiro carbon center by a stereospecific rearrangement of optically active benzofuzed-trans-epoxy acylates leading to spirocyclopentane-1,1'-indane systems. This method is quite useful for the construction of an optically active spiro compound and was applied to the synthesis of the optically pure CDEF-ring unit of I. Cycloaddn. of the optically pure CDEF-ring unit to AB-ring units prepared via benzyne afforded two natural and unnatural-type hexacyclic compds., which were converted to natural and unnatural enantiomers of synthetic I, and the absolute configuration of natural I was determined as S.

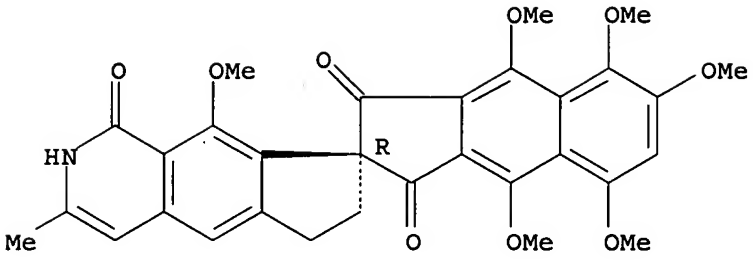
IT 225090-40-4P 225090-41-5P 259752-89-1P
339151-76-7P 339151-77-8P 339151-78-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(enantioselective total synthesis of a potent antitumor antibiotic, fredericamycin A)

RN 225090-40-4 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-3'-carboxaldehyde, 1,1',2',3,6',7'-hexahydro-4,5,6,8,9,9'-hexamethoxy-1,1',3-trioxo-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

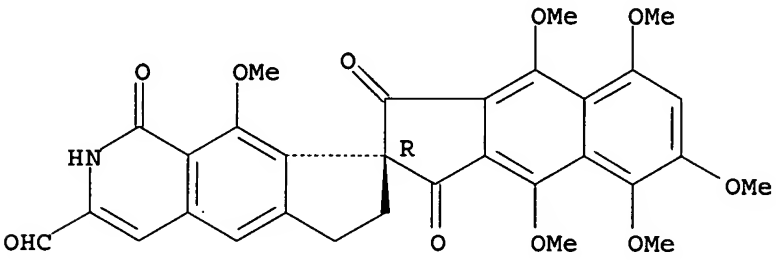


RN 225090-41-5 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-tetrahydro-4,5,6,8,9,9'-hexamethoxy-3'-(1E,3E)-1,3-pentadienyl-, (2S)- (9CI) (CA INDEX NAME)



RN 339151-78-9 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-3'-carboxaldehyde, 1,1',2',3,6',7'-hexahydro-4,5,6,8,9,9'-hexamethoxy-1,1',3-trioxo-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 114 THERE ARE 114 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:151480 CAPLUS
DOCUMENT NUMBER: 132:194246
TITLE: Preparation of intermediates for novel antitumor spiro compounds, fredericamycin A and its analogs
INVENTOR(S): Kita, Yasuyuki; Fujioka, Hiromichi; Akai, Shuji; Higuchi, Kazuhiro
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000072752	A2	20000307	JP 1998-246347	19980831
PRIORITY APPLN. INFO.:			JP 1998-246347	19980831

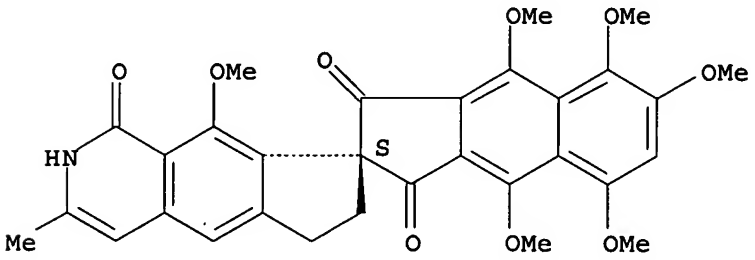
OTHER SOURCE(S): CASREACT 132:194246; MARPAT 132:194246
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The spiro compds. I [R1 = halo, alkyl which may be substituted with OH, alkoxy, or carboxy, CF3, CHO, Ac, alkylsulfonyl, alkanoyl, CO2H, CONH2,

CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-dihydro-4,5,6,8,9,9'-hexamethoxy-3'-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



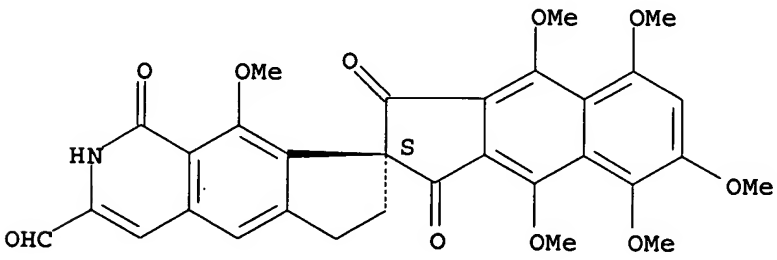
L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:192834 CAPLUS
DOCUMENT NUMBER: 130:352110
TITLE: Asymmetric total synthesis of fredericamycin A
AUTHOR(S): Kita, Yasuyuki; Higuchi, Kazuhiro; Yoshida, Yutaka; Iio, Kiyosei; Kitagaki, Shinji; Akai, Shuji; Fujioka, Hiromichi
CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Osaka University, Suita, 565-0871, Japan
SOURCE: Angewandte Chemie, International Edition (1999), 38(5), 683-686
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The asym. total synthesis of fredericamycin A was accomplished via stereospecific rearrangement of the epoxy acylate and the regiocontrolled intermol. [4+2] cycloaddn. of homophthalic anhydrides to dienophiles and the absolute configuration of the single chiral center was established as (S).

IT 225090-40-4P 225090-41-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(asym. synthesis of fredericamycin A)

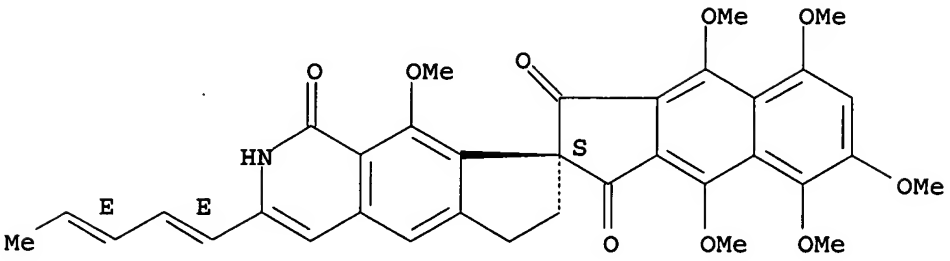
RN 225090-40-4 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-3'-carboxaldehyde, 1,1',2',3,6',7'-hexahydro-4,5,6,8,9,9'-hexamethoxy-1,1',3-trioxo-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



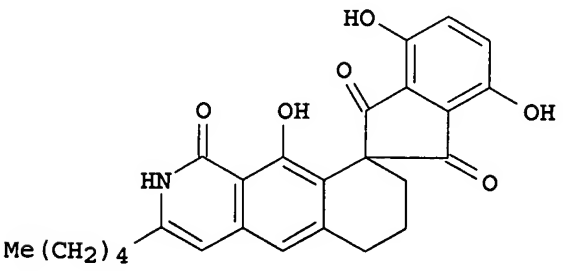
RN 225090-41-5 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-tetrahydro-4,5,6,8,9,9'-hexamethoxy-3'-(1E,3E)-1,3-pentadienyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

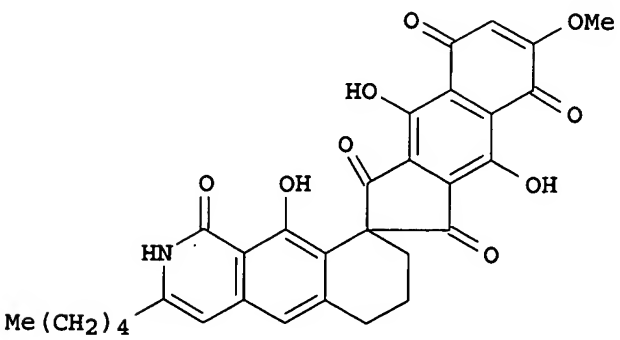


REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:257730 CAPLUS
DOCUMENT NUMBER: 125:10466
TITLE: Further model studies related to fredericamycin A: analogs in which ring C is expanded to six atoms, and an examination of the diastereoselectivity of radical spirocyclization
AUTHOR(S): Clive, Derrick L. J.; Kong, Xianglong; Paul, Christine Chua
CORPORATE SOURCE: Chem. Dep., Univ. Alberta, Edmonton, AB, T6G 2G2, Can.
SOURCE: Tetrahedron (1996), 52(17), 6085-116
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



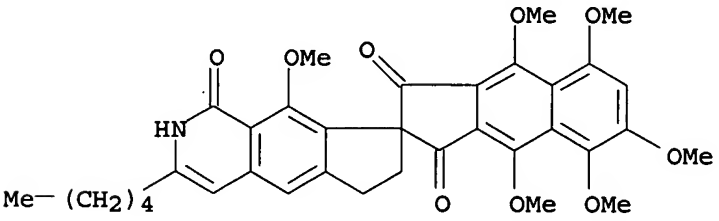
II

AB The fredericamycin A analogs I and II were synthesized. A key step is the process of radical spirocyclization, and the diastereoselectivity of this reaction was studied with model compds. In vitro tests showed that II was active against certain cell lines of colon and prostate cancer, while I was essentially inactive.

IT 176981-39-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(diastereoselectivity of radical spirocyclization in relation to preparation of fredericamycin A analogs)

RN 176981-39-8 CAPLUS

CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-dihydro-4,5,6,8,9,9'-hexamethoxy-3'-pentyl- (9CI) (CA INDEX NAME)



L7 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:196595 CAPLUS

DOCUMENT NUMBER: 122:160324

TITLE: Total Synthesis of Crystalline (±)-Fredericamycin A. Use of Radical Spirocyclization

AUTHOR(S): Clive, Derrick L. J.; Tao, Yong; Khodabocus, Ahmad; Wu, Yong-Jin; Angoh, A. Gaetan; Bennett, Sharon M.; Boddy, Christopher N.; Bordeleau, Luc; Kellner, Dorit; et al.

CORPORATE SOURCE: Department of Chemistry, University of Alberta, Edmonton, AB, T6G 2G2, Can.

SOURCE: Journal of the American Chemical Society (1994), 116(25), 11275-86
CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:160324

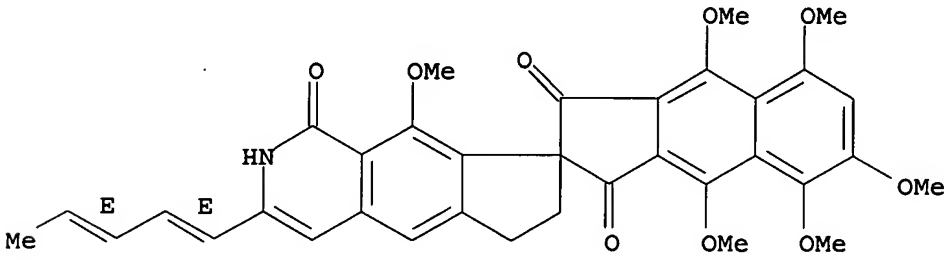
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Crystalline (±)-fredericamycin A (I) was synthesized using, as a key step, 5-exo-digonal radical closure of selenide II. The selenide was generated from the corresponding ketone, itself assembled from two components: aldehyde III and bromonaphthalene IV. The product of the radical cyclization was converted into a spiro diketone, and the pentadienyl chain was then formed by a Wittig reaction. Selective deprotection of ring A was accompanied by isomerization of the diene system to the required E,E geometry, and treatment with boron tribromide, followed by aqueous hydrolysis in the presence of air, effected selective demethylation and oxidation to (±)-I. The radical spirocyclization used in this synthesis is a

general method.
IT 145223-00-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of racemic fredericamycin A via radical spirocyclization)
RN 145223-00-3 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-dihydro-4,5,6,8,9,9'-hexamethoxy-3'-(1E,3E)-1,3-pentadienyl-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

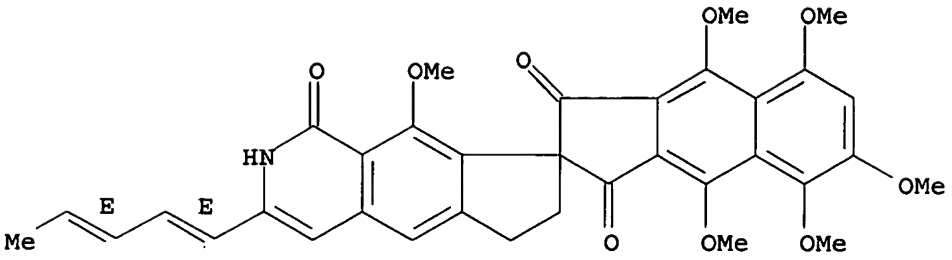


L7 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:38651 CAPLUS
DOCUMENT NUMBER: 118:38651
TITLE: Total synthesis of (±)-fredericamycin A. Use of radical spirocyclization
AUTHOR(S): Clive, Derrrick L. J.; Tao, Yong; Khodabocus, Ahmad; Wu, Yong Jin; Angoh, A. Gaetan; Bennett, Sharon M.; Boddy, Christopher N.; Bordeleau, Luc; Kellner, Dorit; et al.
CORPORATE SOURCE: Dep. Chem., Univ. Alberta, Edmonton, AB, T6G 2G2, Can.
SOURCE: Journal of the Chemical Society, Chemical Communications (1992), (20), 1489-90
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB (±)-Fredericamycin A (I) is synthesized using 5-exo-diagonal radical closure of selenide II and an unusual procedure for both selective demethylation and adjustment of the stereochem. in the pentadienyl side chain of the advanced intermediate III .
IT 145223-00-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)
RN 145223-00-3 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-dihydro-4,5,6,8,9,9'-hexamethoxy-3'-(1E,3E)-1,3-pentadienyl-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L7 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:49879 CAPLUS
DOCUMENT NUMBER: 106:49879
TITLE: Fredericamycin A derivatives
INVENTOR(S): Hasegawa, Hiroshi; Yokoi, Koichi; Narita, Masa; Asaoka, Takemitsu; Kukita, Kenichi; Ishizeki, Seiji; Nakajima, Toshiaki
PATENT ASSIGNEE(S): S. S. Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61044867	A2	19860304	JP 1984-166283	19840808
JP 03004548	B4	19910123		
PRIORITY APPLN. INFO.:			JP 1984-166283	19840808

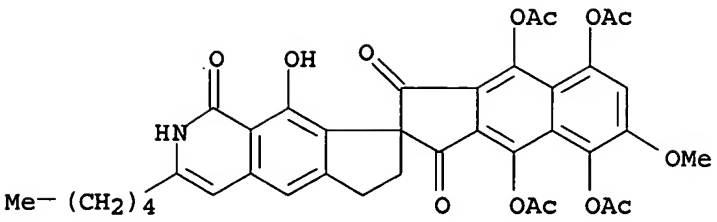
OTHER SOURCE(S): CASREACT 106:49879
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Stable fredericamycin A derivs. I (R = H, C1-4 alkyl; R1 = C1-4 alkyl), useful as neoplasm inhibitors, were prepared Thus, fredericyamin A (II) was reduced over 10% Pd/C in THF at room temperature for 10 h, then stirred with Ac2O for 1 h to give 80% III. III was heated with MeI and Ag2O in Me2CO for 1 h to give 56.3% I (R = R1 = Me), whose i.p. administration prolonged the lives of mice transplanted with Ehrlich cancer cells (5 + 106 cells/animal) in a dose dependent manner. A saline solution of III was more stable than that of II.

IT 97854-12-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and alkylation of)

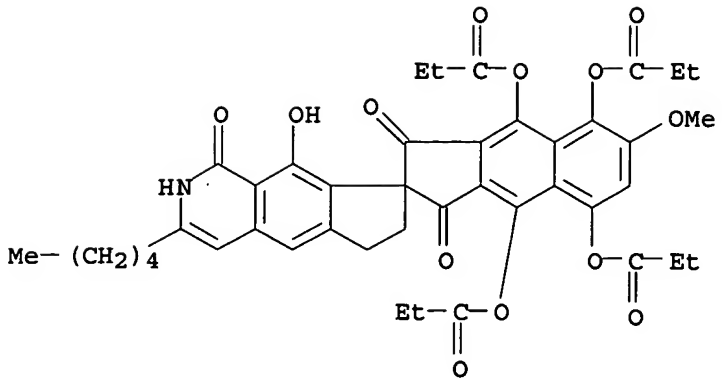
RN 97854-12-1 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 4,5,8,9-tetrakis(acetyloxy)-6',7'-dihydro-9'-hydroxy-6-methoxy-3'-pentyl- (9CI) (CA INDEX NAME)



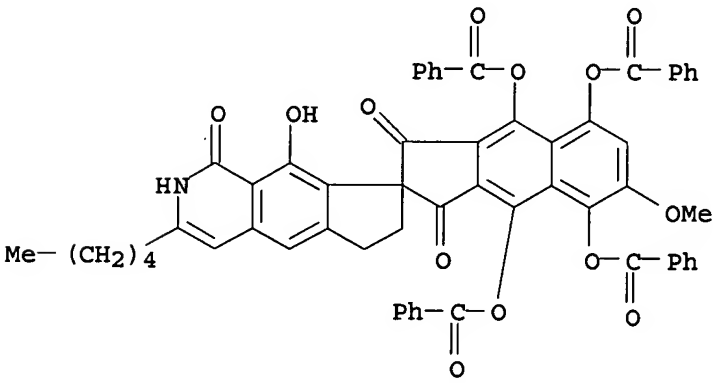
L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:33948 CAPLUS
DOCUMENT NUMBER: 104:33948
TITLE: Fredericamycin A derivatives
INVENTOR(S): Yokoi, Koichi; Hasegawa, Hiroshi; Narita, Masa; Asaoka, Takemitsu; Kukita, Kenichi; Ishizeki, Seiji; Nakajima, Toshiaki
PATENT ASSIGNEE(S): S. S. Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60152468	A2	19850810	JP 1984-6746	19840118

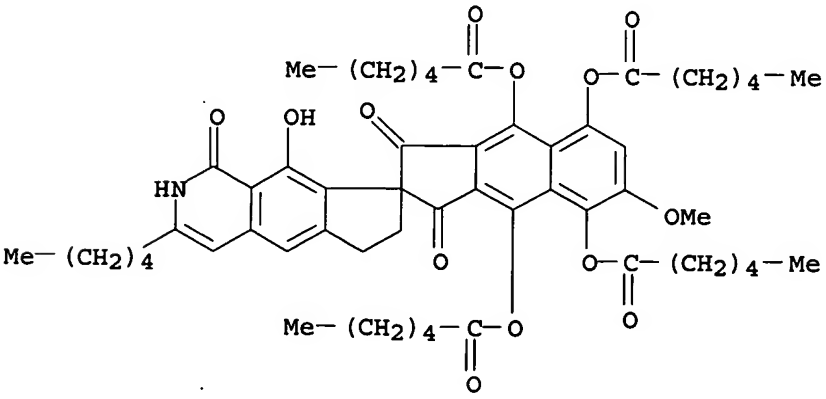
PRIORITY APPLN. INFO.: JP 1984-6746 19840118
OTHER SOURCE(S): CASREACT 104:33948
GI For diagram(s), see printed CA Issue.
AB Title compds. I (R = acyl, X = Q, Q1), useful as neoplasm inhibitors (no data), were prepared Thus, fredericamycin A was reduced with H2 in THF in the presence of 10% Pd/C to give 60% tetrahydrofredericamycin A, which was treated with n-lauric anhydride in pyridine to give 75.6% I (R = n-lauroyl, X = Q).
IT 97854-13-2P 97854-14-3P 97867-37-3P
97867-38-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as neoplasm inhibitor)
RN 97854-13-2 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-dihydro-9'-hydroxy-6-methoxy-4,5,8,9-tetrakis(1-oxopropoxy)-3'-pentyl- (9CI) (CA INDEX NAME)



RN 97854-14-3 CAPLUS
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 4,5,8,9-tetrakis(benzoyloxy)-6',7'-dihydro-9'-hydroxy-6-methoxy-3'-pentyl- (9CI) (CA INDEX NAME)



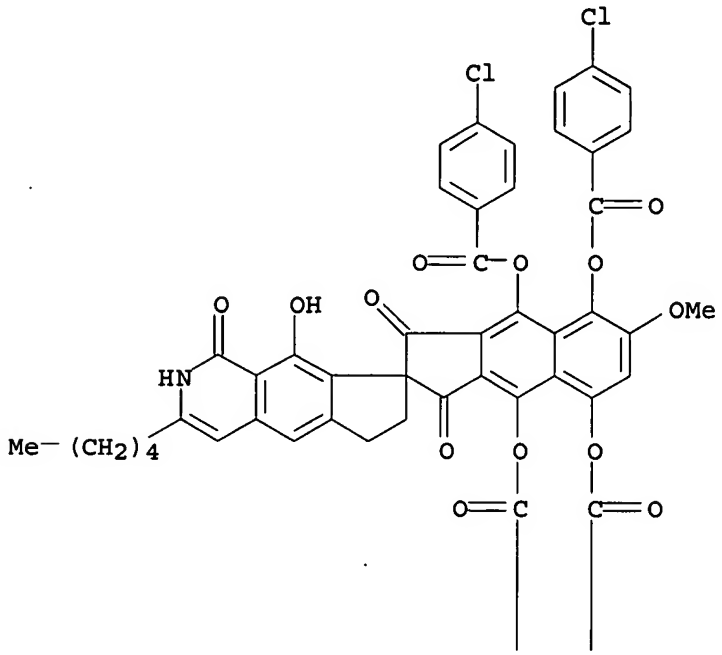
RN 97867-37-3 CAPLUS
CN Hexanoic acid, 1,1',2',3,6',7'-hexahydro-9'-hydroxy-6-methoxy-1,1',3-trioxo-3'-pentylspiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-4,5,8,9-tetrayl ester (9CI) (CA INDEX NAME)



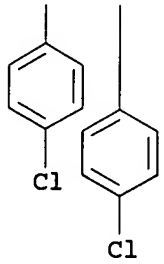
RN 97867-38-4 CAPLUS
CN Benzoic acid, 4-chloro-, 1,1',2',3,6',7'-hexahydro-9'-hydroxy-6-methoxy-

1,1',3-trioxo-3'-pentylspiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-4,5,8,9-tetrayl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L7 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:504798 CAPLUS
DOCUMENT NUMBER: 103:104798
TITLE: Fredericamycin A derivative
INVENTOR(S): Yokoi, Koichi; Hasegawa, Hiroshi; Narita, Tadashi; Asaoka, Takemitsu; Kurita, Kenichi; Ishizeki, Seiji; Nakashima, Toshiaki
PATENT ASSIGNEE(S): S. S. Pharmaceutical Co., Ltd., Japan
SOURCE: Ger. Offen., 44 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

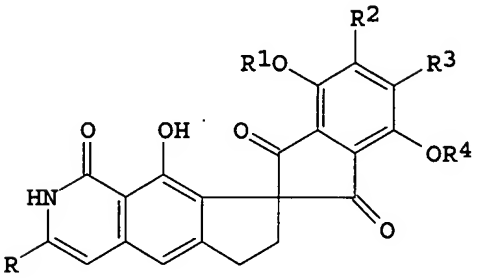
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

DE 3430365	A1	19850307	DE 1984-3430365	19840817
JP 60042368	A2	19850306	JP 1983-150522	19830818
JP 01019386	B4	19890411		
JP 60056960	A2	19850402	JP 1983-165489	19830908
JP 01049267	B4	19891024		
JP 60058964	A2	19850405	JP 1983-166082	19830909
JP 01049268	B4	19891024		
GB 2145084	A1	19850320	GB 1984-20246	19840809
GB 2145084	B2	19870128		
US 4584377	A	19860422	US 1984-639113	19840809
CA 1267147	A1	19900327	CA 1984-460842	19840813
FR 2550791	A1	19850222	FR 1984-12905	19840817
FR 2550791	B1	19881014		
CH 669379	A	19890315	CH 1984-3957	19840817

PRIORITY APPLN. INFO.: JP 1983-150522 A 19830818
JP 1983-165489 A 19830908
JP 1983-166082 A 19830909

OTHER SOURCE(S): CASREACT 103:104798; MARPAT 103:104798

GI



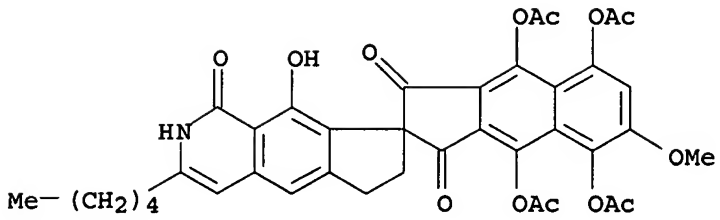
I

AB Fredericamycin A derivs. I [R = CH:CHCH:CHMe, pentyl; R1 = H, acyl; R2R3 = COCH:C(OMe)CO, C(OR1):CHC(OMe):COR1] were prepared Thus fredericamycin A (II) was acetylated to give I [R = CH:CHCH:CHMe, R1 = Ac, R2R3 = COCH:C(OMe)CO, III]. Catalytic hydrogenation of II, followed by acetylation, gave I [R = pentyl, R1 = Ac, R2R3 = C(OAc):CHC(OMe):COAc]. Catalytic hydrogenation of II, followed by treatment with Me2SO, gave I [R = pentyl, R1 = H, R2R3 = COCH:C(OMe)CO (IV, R1 = H)] which was acetylated to IV (R1 = Ac). III and IV (R1 = Ac) had min. inhibitory concns. against Staphylococcus aureus Smith of 6.25 and 25 μg/mL, resp. They had antitumor activity i.p. in mice at 0.125 and 4.0 mg/kg day.

IT 97854-12-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antitumor activity of)

RN 97854-12-1 CAPLUS

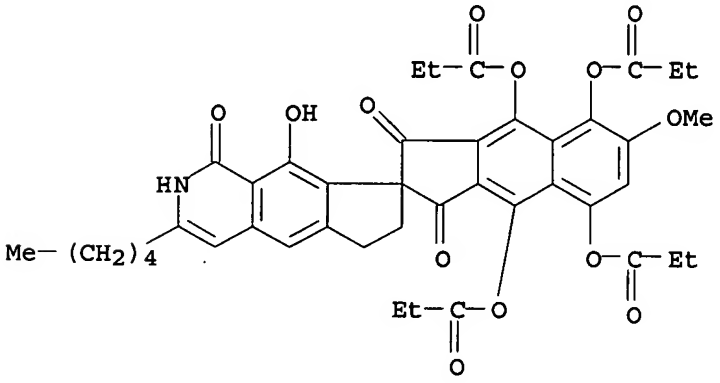
CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 4,5,8,9-tetrakis(acetyloxy)-6',7'-dihydro-9'-hydroxy-6-methoxy-3'-pentyl- (9CI) (CA INDEX NAME)



IT 97854-13-2P 97854-14-3P 97867-37-3P
97867-38-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

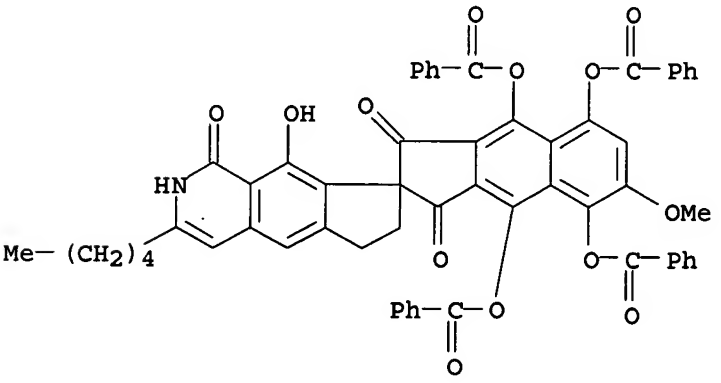
RN 97854-13-2 CAPLUS

CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 6',7'-dihydro-9'-hydroxy-6-methoxy-4,5,8,9-tetrakis(1-oxopropoxy)-3'-pentyl- (9CI) (CA INDEX NAME)



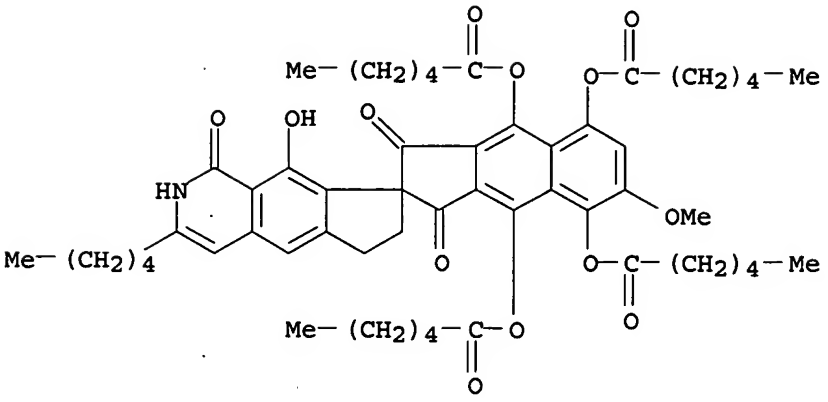
RN 97854-14-3 CAPLUS

CN Spiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-1,1',3(2'H)-trione, 4,5,8,9-tetrakis(benzoyloxy)-6',7'-dihydro-9'-hydroxy-6-methoxy-3'-pentyl- (9CI) (CA INDEX NAME)



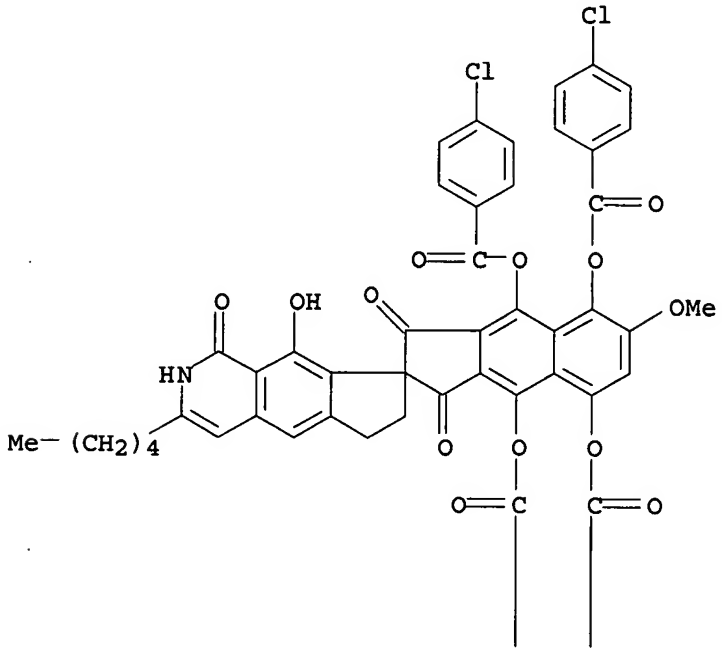
RN 97867-37-3 CAPLUS

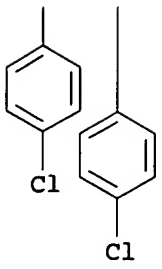
CN Hexanoic acid, 1,1',2',3,6',7'-hexahydro-9'-hydroxy-6-methoxy-1,1',3-trioxo-3'-pentylspiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-4,5,8,9-tetrayl ester (9CI) (CA INDEX NAME)



RN 97867-38-4 CAPLUS
CN Benzoic acid, 4-chloro-, 1,1',2',3,6',7'-hexahydro-9'-hydroxy-6-methoxy-1,1',3-trioxo-3'-pentylspiro[2H-benz[f]indene-2,8'-[8H]cyclopent[g]isoquinoline]-4,5,8,9-tetrayl ester (9CI) (CA INDEX NAME)

PAGE 1-A





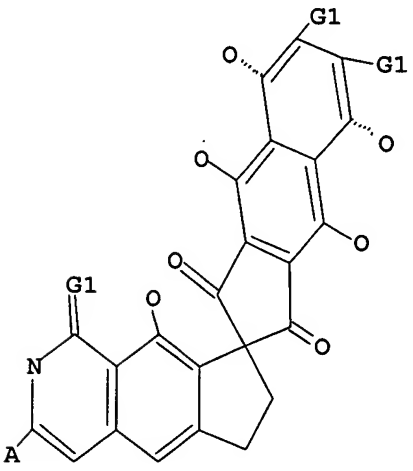
=> d his

(FILE 'HOME' ENTERED AT 10:39:52 ON 16 AUG 2006)

FILE 'REGISTRY' ENTERED AT 10:40:10 ON 16 AUG 2006
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 S L1 FULL
L4 STRUCTURE UPLOADED
L5 0 S L4
L6 13 S L4 FULL

FILE 'CAPLUS' ENTERED AT 10:42:10 ON 16 AUG 2006
L7 9 S L6

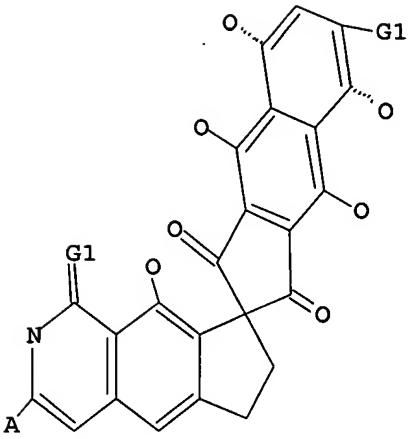
=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

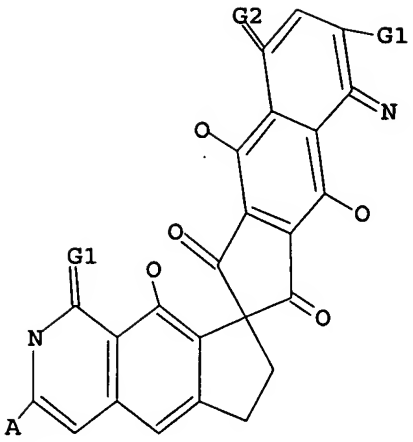
=> d l4
L4 HAS NO ANSWERS
L4 STR



G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

```
=> => d his

     (FILE 'HOME' ENTERED AT 10:39:52 ON 16 AUG 2006)

     FILE 'REGISTRY' ENTERED AT 10:40:10 ON 16 AUG 2006
L1                STRUCTURE UPLOADED
L2              0 S L1
L3              0 S L1 FULL
L4                STRUCTURE UPLOADED
L5              0 S L4
L6             13 S L4 FULL

     FILE 'CAPLUS' ENTERED AT 10:42:10 ON 16 AUG 2006
L7              9 S L6

     FILE 'REGISTRY' ENTERED AT 10:43:12 ON 16 AUG 2006
L8                STRUCTURE UPLOADED
L9              0 S L8
L10               STRUCTURE UPLOADED
L11             0 S L10

=> d l8
L8 HAS NO ANSWERS
L8                STR
```

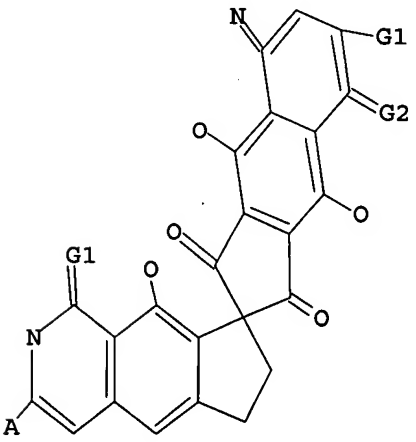


G1 O,S,N

G2 O,N

Structure attributes must be viewed using STN Express query preparation.

=> d l10
L10 HAS NO ANSWERS
L10 STR



G1 O,S,N

G2 O,N

Structure attributes must be viewed using STN Express query preparation.

=>